T. G. PLANT.

AUXILIARY LASTING DEVICE.

APPLICATION FILED SEPT. 20, 1909.

958,286.

Patented May 17, 1910.

2 SHEETS—SHEET 1.

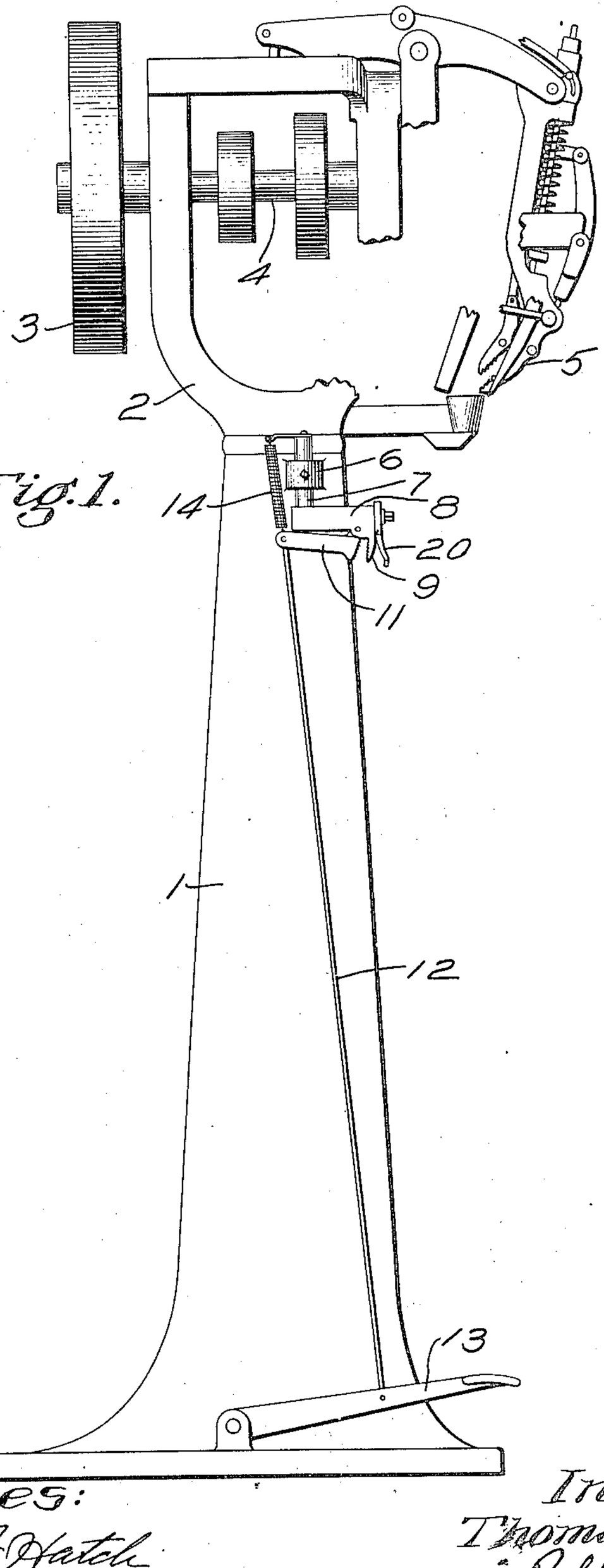


Fig. 1.

Witnesses:
Powell F. Hatch
Redfield Allen

Inventor
Thomas G. Plant
by Robt. P. Hains Atty.

T. G. PLANT.

AUXILIARY LASTING DEVICE.

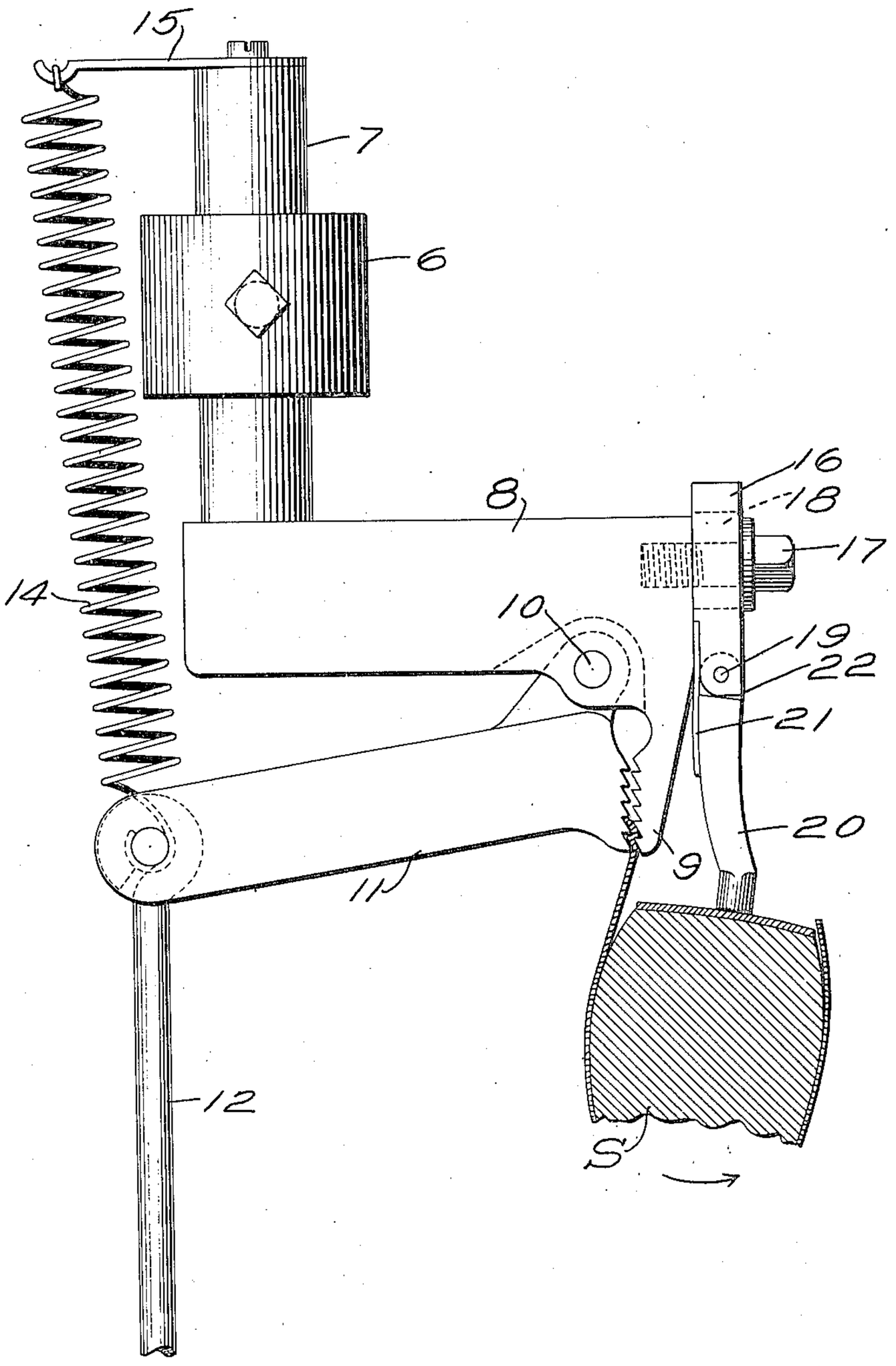
APPLICATION FILED SEPT. 20, 1909.

958,286.

Patented May 17, 1910.

2 SHEETS—SHEET 2.

Fig. 2.



Witnesses:
Roswell F. Hatch.
Redfield H. Allen

Inventor
Thomas G. Plant
by Robt. P. Harris,
Atty.

UNITED STATES PATENT OFFICE.

THOMAS G. PLANT, OF BOSTON, MASSACHUSETTS.

AUXILIARY LASTING DEVICE.

958,286. Specification of Letters Patent. Patented May 17, 1910.

Application filed September 20, 1909. Serial No. 518,689.

To all whom it may concern:

Be it known that I, THOMAS G. PLANT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Auxiliary Lasting Devices, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention relates to lasting machines, particularly those known as side lasters, and its object is to provide means for preliminarily stretching the upper over the last so that it may be engaged by the pincers common to machines of this class.

When the shoe is presented to the side laster, the upper often projects in places only a slight distance above the sole due to scant cutting of the upper and shrinkage after assembling. It has been usual heretofore for the operator to stretch the upper in such places with a pair of hand lasting pincers, an operation which requires separate manipulation of the shoe on a support.

This invention aims to provide means so that when the operator, in the course of the lasting operation, comes to a place where the lasting pincers are unable to reach the upper, he can stretch this place while still retaining the shoe in his grasp in the proper position to continue lasting.

It is understood that this device admits of great variation in form without departing from the spirit of the invention, one form of which is shown in the accompanying drawings.

In the drawings:—Figure 1 is a side view of a lasting machine, showing the application of the present invention thereto; and Fig. 2 is an enlarged detached view of the auxiliary pincers.

For convenience in illustration this invention has been shown as attached to a side laster such as is fully shown and described in patent to Thomas H. Seely, No. 945,291, dated Jan. 4, 1910, but its use is not limited to machines of this class. It is equally applicable to any of the many classes of lasting machines.

Referring to Fig. 1, 1 is a column having a head 2 carrying a driving pulley 3 mounted on a shaft 4 suitably connected to a pair of pincers 5, a full description of which may be had by reference to the above mentioned application. Near the top of the column 1 is a lug 6 having adjustably mounted therein a stud 7. Attached to the lower end of this stud is a block 8, the outer end of which forms the fixed jaw 9 of a pair of pincers. Pivoted at 10 to the block 8 is a lever 11, one end of which forms the movable jaw to coact with the jaw 9, the other end being connected to a treadle rod 12 operated by a treadle 13 pivoted on the base of the column. There is also connected to the lever 11 a spring 14, the upper end of which is connected to some convenient point, such as a hook 15 attached to the stud 7. The spring 14 will tend to hold the lever 11 and its treadle and treadle rod in raised positions with the pincer jaws open, as shown in Fig. 1.

On the forward end of the block 8 is a smaller block 16, vertically adjustable on the block 8 by means of a screw 17 and a slot 18. Pivoted at 19 to the block 16 is a finger 20 adapted to engage the sole of a shoe, as shown in Fig. 2. A spring 21 normally holds the finger 20 in its outward position defined by a suitable stop, as 22, formed as part of the knife blade joint connecting the finger or rest 20 with its support.

When, during the process of lasting, the upper projects insufficiently to be engaged by the lasting pincers 5, as is shown on the right of the shoe S, Fig. 2, the operator, still holding the shoe in lasting position, will place the upper in position against the fixed jaw 9, then, pressing the treadle 13 to grip the upper, will turn the shoe in the direction of the arrow, Fig. 2. The finger 20, the end of which may be scored or roughened, will contact with the sole of the shoe, forming a fulcrum about which the shoe may turn. As the shoe is thus turned, the fulcrum will yield toward the auxiliary pincers against the spring 21, so that the upper may be stretched and also brought over the sole in a similar manner to the usual hand lasting. Upon release of the treadle 13 the operator can at once continue the lasting operation.

What is claimed is:

1. In a lasting machine, the combination of a support, relatively fixed and movable pincer jaws mounted on said support for vertical adjustment, means for operating the jaws, a pivotally mounted finger adjustably connected to the fixed jaw, and a spring for maintaining the finger in position with respect to pivotal movement that its lower

end may act as a fulcrum for the shoe and permitting the finger to swing toward the jaws as the shoe is turned.

2. In a lasting machine, the combination of a supporting frame, a pair of pincer jaws carried by said frame to engage the upper while the shoe is held in the hands of the operator, treadle means for closing the pincers on the upper, a pivotally mounted finger to engage the shoe sole and about which the shoe may be turned with respect to the frame supported pincers to draw the upper into position, and means permitting said finger to turn on its pivot toward the pincers.

3. In a lasting machine, the combination of a supporting frame, a fixed and a pivotally mounted pincer jaw supported by said frame, a treadle for turning the pivotally mounted jaw, and a pivotally mounted fulcrum point about which the shoe is movable with respect to the frame supported pincer jaws to draw the upper about the last.

4. In a lasting machine, the combination of a supporting frame, a fixed jaw, a jaw pivoted to the fixed jaw, a fixed bracket supporting said jaws, means under control of the operator for actuating said jaws to grasp the upper of the shoe, a pivotally mounted fulcrum pin disposed adjacent said jaws to bear upon the shoe and about which the shoe may be turned with respect to the frame supported pincer jaws to draw the upper about the last, and a spring permitting the fulcrum pin to yield toward the jaws.

5. In a lasting machine, the combination of a supporting frame, a pair of pincer jaws, a fixed bracket supporting said jaws, means under control of the operator for actuating said jaws to grasp the upper of a shoe, a fulcrum pin disposed adjacent said jaws to bear upon the shoe and about which the shoe may be turned with respect to the frame supported pincer jaws to draw the upper about the last, said fulcrum pin being pivotally mounted, and a spring normally acting to hold the fulcrum pin in operative position and allowing it to yield to permit the pin to swing toward the pincer jaws as the shoe is turned.

6. In a lasting machine, the combination of a supporting frame, a fixed pincer jaw mounted thereon, a pivoted pincer jaw, treadle controlled means for operating said jaws, and a pivotally mounted fulcrum pin carried by the fixed jaw to engage the sole of a shoe and about which the shoe may be turned in drawing the upper about the last.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

THOMAS G. PLANT.

Witnesses:

ALFRED H. HANDLEY,

EDWARD L. STANERY.